

IN THE CLAIMS:

1.-2. (Cancelled)

3. (Currently Amended) The playback apparatus of Claim [[2]] 15, wherein

the title selection by the module manager is a branch from one title to another title,

when the run attribute assigned to the application shows maintaining of status,
5 and the application is not run in the branch origin title, the application manager causes the application to have a non-run status in the branch destination title, and

when the run attribute assigned to the application shows maintaining of status,
and the application is running in the branch origin title, the application manager runs the application in the branch destination title.

4. (Currently Amended) The playback apparatus of Claim [[2]] 15, wherein

the title selection by the module manager is a branch from one title to another title,

when the run attribute assigned to the application shows automatic run, and the
5 application is not run in the branch origin title, the application manager runs the application in the branch destination title, and

when the run attribute assigned to the application shows automatic run, and the application is running in the branch origin title, the application manager maintains the status of the application in the branch destination title.

5. (Currently Amended) The playback apparatus of Claim [[2]] 15, wherein
the title selection by the module manager is a branch from one title to another
title.

when the run attribute assigned to the application shows suspend, and the
5 application is running in the branch origin title, the application manager controls such that, in the
branch destination title, the application occupies resources of the playback apparatus, but the
status of the application is changed such that CPU power in the playback apparatus is not
allocated to the application.

- 6.-7. (Cancelled)

8. (Currently Amended) The recording medium of Claim [[1]] 14, wherein
the title selection by the module manager is a branch from one title to another
title.

the run attribute in a branch destination title is an automatic run attribute for
5 automatically running the application, if the application has a non-run status in the branch origin
title.

9. (Currently Amended) The recording medium of Claim [[1]] 14, wherein
the title selection by the module manager is a branch from one title to another
title.

the run attribute in a branch destination title is a status maintain attribute for
5 maintaining running of the application in the branch destination title, if the application is being
run in the corresponding title.

10. (Currently Amended) The recording medium of Claim [[1]] 14, on which is further recorded a digital stream and playlist information that references the digital stream, and

[[the]] each title is a unit of playback that is associated with at least one piece of playlist information that is selectable by a user.

11. (Currently Amended) The playback apparatus of Claim [[2]] 15, wherein

the title selection by the module manager is a branch from one title to another title.

the status of the application in the branch destination title is determined based on
5 a status of the application in a branch origin title and the run attribute of the application in the branch destination title.

12. (Currently Amended) The playback apparatus of claim [[2]] 15, wherein

the title selection by the module manager is a branch from one title to another title.

further recorded on the recording medium are a digital stream and playlist
5 information that references the digital stream, and

[[the]] each title is a unit of playback that is associated with the digital stream via the playlist information and that is selectable by a user operation.

13. (New) A recording method, comprising the steps of:

generating volume data; and

writing the generated volume data to a recording medium,

wherein the volume data includes an index table and a plurality of operation mode

5 objects,

the index table is read from the recording medium by a module manager, and shows (i) a plurality of titles and (ii) in correspondence with each title, which of the operation mode objects is to be handed to an execution module in a playback apparatus when the corresponding title is selected,

10 each operation mode object (i) stores therein an application management table and (ii) stipulates a control procedure in a second mode that is a second of two modes, a first mode being a mode in which the playback apparatus operates on a command base, and the second mode being an mode in which the playback apparatus operates on a base of an application written in an object-oriented language,

15 an execution module for the second mode is a virtual machine platform unit,

the application management table shows in correspondence (i) an application to be loaded to the virtual machine platform unit when the corresponding operation mode object is handed to the execution module for the second mode, and (ii) a run attribute of the corresponding application, and

20 the run attribute shows how a status of the corresponding application is to be controlled when loaded to the virtual machine platform unit.

14. (New) A recording medium on which is recorded an index table and a plurality of operation mode objects, wherein

the index table is read from the recording medium by a module manager, and shows (i) a plurality of titles and (ii) is correspondence with each title, which of the operation mode objects is to be handed to an execution module in a playback apparatus when the corresponding title is selected,

each operation mode object (i) stores therein an application management table and (ii) stipulates a control procedure in a second mode that is a second of two modes, a first mode being a mode in which the playback apparatus operates on a command base, and the second mode being a mode in which the playback apparatus operates on a base of an application written in an object-oriented language,

an execution module for the second mode is a virtual machine platform unit,

the application management table shows in correspondence (i) an application to be loaded to the virtual machine platform unit when the corresponding operation mode object is handed to the execution module for the second mode, and (ii) a run attribute of the corresponding application, and

the run attribute shows how a status of the corresponding application is to be controlled when loaded to the virtual machine platform unit.

15. (New) A playback apparatus that simultaneously performs playback of any one of a plurality of titles recorded on a recording medium, and execution of an application, comprising:

at east two execution modules each operable to execute a different operation

5 mode;

a module manager operable to (i) read an index table from the recording medium, (ii) selected a title to be a current title, from among a plurality of titles shown in the index table, and (iii) hand an operation mode object corresponding to the current title to one of the execution modules,

10 wherein recorded on the recording medium are the index table and a plurality of operation mode objects,

the index table shows (i) a plurality of titles and (ii) in correspondence with each title, which of the operation mode objects is to be handed to an execution module when the corresponding title is selected,

15 each operation mode object (i) stores therein an application management table and (ii) stipulates a control procedure in a second mode that is a second of two modes, an first mode being a mode in which the playback apparatus operates on a command base, and the second mode being a mode in which the playback apparatus operates on a base of an application written in an object-oriented language,

20 the application management table shows an application in correspondence with a run attribute of the application,

of the at east two execution modules, an execution module for the second mode is a virtual machine platform unit and includes an application manager, and

the application manager, when an operation mode object corresponding to the
25 current title is handed to the virtual machine platform unit, loads the application shown in the application management table to the virtual machine platform unit, and controls a status of the loaded application based on the corresponding run attribute shown in the application management table.

16. (New) A computer read-able recording medium on which is recorded a program executed by a computer,

the computer including at least two execution modules each operable to execute a different operation mode,

5 the program including:

a selection step of causing the computer to (i) read an index table from the recording medium, (ii) select a title to be current title, from among a plurality of titles shown in the index table, and (iii) hand an operation mode object corresponding to the current title to one of execution modules; and

10 an execution step of causing one of the execution modules to execute a control procedure,

wherein recorded on the recording medium are the index table and plurality of operation mode objects,

the index table shows (i) a plurality of titles and (ii) in correspondence with each
15 title, which of the operation mode objects is to be handed to an execution module in a playback
apparatus when the corresponding title is selected,

each operation mode object (i) stores therein an application management table and
(ii) stipulates a control procedure in a second mode that is a second of two modes, a first mode
being a mode in which the computer operates on a command base, and the second mode being a
20 mode in which the computer operates on a base of an application written in an object-oriented
language,

the application management table shows an application in correspondence with a
run attribute of the application,

of at least two execution modules, an execution module for the second mode is a
25 virtual machine platform unit,

the execution step, when an operation mode object corresponding to the current
title is handed to the virtual machine platform unit, loads the application shown in the application
management table to the virtual machine platform unit, and controls a status of the loaded
application based on the corresponding run attribute shown in the application management table.

17. (New) A playback method that causes a computer to simultaneously perform playback of any one of a plurality of titles recorded on a recording medium, and execution of an application,

the computer including at least two execution modules each operable to execute a different operation mode,

the playback method comprising:

a selection step of causing the computer to (i) read an index table from the recording medium, (ii) select a title to be current title, from among a plurality of titles shown in the index table, and (iii) hand an operation mode object corresponding to the current title to one of execution modules; and

an execution step of causing one of the execution modules to execute a control procedure,

wherein recorded on the recording medium are the index table and a plurality of operation mode objects,

the index table shows (i) a plurality of titles and (ii) in correspondence with each title, which of the operation mode objects is to be handed to an execution module in a playback apparatus when the corresponding title is selected,

each operation mode object (i) stores an application management table and (ii) stipulates a control procedure in a second mode that is a second of two modes, a first mode being a mode in which the computer operates on a command base, and the second mode being a mode in which the computer operates on a base of an application written in an object-oriented language,

the application management table shows an application in correspondence with a run attribute of the application,

of at least two execution modules, an execution module for the second mode is a virtual machine platform unit,

the execution step, when an operation mode object corresponding to the current title is handed to the virtual machine platform unit, loads the application shown in the application management table to the virtual machine platform unit, and controls a status of the loaded application based on the corresponding run attribute shown in the application management table.